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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/660,651

09/12/2003

Masato Fukuda

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FITZPATRICK CELLA HARPER & SCINTO

1290 Avenue of the Americas

NEW YORK, NY 10104-3800

EXAMINER

DICKERSON, CHAD S

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/660,651	<b>Applicant(s)</b> FUKUDA, MASATO	
	<b>Examiner</b> CHAD DICKERSON	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 7, filed 6/30/2010, with respect to the 101 rejection have been fully considered and are persuasive. The 101 rejection of claim 17 has been withdrawn.

2. Applicant's arguments with respect to claims 14-17 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims has necessitated the new ground(s) of rejection. However, the same reference of Holmstead is still being applied. The arguments filed on 6/30/2010 asserted that the feature of deleting information when not successively designated while not deleting information that is successively designated is not performed. The Examiner respectfully disagrees with this assertion.

In regards to the assertion, the Examiner reviewed paragraph [0051] of Holmstead and this passage discloses two directories that store different types of information. One directory is used for image data that is not successively or continually used while data in the other directory is successively used. In the first directory, the image data is deleted or overwritten every thirty days in order to clear that memory space while the second directory maintains that information indefinitely since it is constantly being used. These directory functions are believed to perform the feature of the claim limitation regarding the deletion function since data is being deleted when it is not successively used while the other image data is not deleted due to repeated usage.

In addition, since this feature and all the rest of the claim limitations are taught by Holmstead, the reference anticipates the claim limitations below.

Therefore, in view of the above arguments, the reference of Holmstead is used to anticipate the limitations in the claims filed 6/30/2010.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Holmstead '905 (US Pub 2004/0021905).

Re claim 14: Holmstead '905 discloses an information processing apparatus communicating with a server device and a printer (i.e. a graphical user interface (114) sends commands to the printer device to operate the control system (306) in a normal or schedule mode. This controls the printer since the control system is commanded to download print job elements from a server specific to the mode used in order to print a print job that is generated from the print job elements; see paragraphs [0033] and [0060]-[0071]), the information processing apparatus comprising:

a designation unit configured to designate a plurality of image data to be printed among image data stored in the server device in response to a user operation (i.e. in the system, the memories storing the image data are compared to one another after the user identifies another print job to print and the input buffer (304) is updated by the set of print elements that were not totally present in the print job designated. The system determines if the print job stored in the input buffer contains all of the needed elements for the job in the local memory. If the job does not contain all of the needed elements in the local memory, the CPU designates image data among the other image data stored in the remote server devices the specific elements needed to complete the desired print job; see paragraphs [0033]-[0044]);

a downloading unit configured to download the designated image data from the server device (i.e. the Holmstead reference downloads image data identified by job element information from a server device through a network card that facilitates network communication. Since the internal components in the printer can be in a host computer coupled to a printer, the functionality of the system using a host computer with the input buffer and local memory is an alternative implementation of the method of printing image data. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that

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were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]);

a cache memory configured to cache the downloaded image data (i.e. in Holmstead '905 the system can be configured to have components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100), or acquired from the remote site, in association with the host computer (206). The elements downloaded from the remote site is stored in the local memory, which is located in the printer, and the local memory has print job information that has been designated for printing and acquired from the server device. The information stored is also from previous jobs that have been printed on the printer and the step (414) is used to store a print ready document on the printer with the previously printed job; see figs. 2 and 3; paragraphs [0032]-[0044]);

a print processing unit configured to read the cached image data from the cache memory and execute print processing of the read image data (i.e. in the system, the CPU checks to see if all the data needed to print a job is located within the cache memory device. If all the information is needed within the cache memory device, the print function is operated based on the information read from the cache; see ¶ [0032]-[0044]); and

a deletion unit configured to delete from the cache memory the image data which is not successively designated by said designation unit as image data to be printed (i.e.

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within the cache memory is different directories. Data that is not successively designated to be printed may be stored in directory A. With the image data being stored in this directory, cached image data can be erased or overwritten every thirty days since this information is not used continually; see ¶ [0051]), and not delete from the cache memory the image data which is successively designated by said designation unit, when said designation unit newly designates a plurality of image data (i.e. Other image data can be stored in directory B within the local or cache memory. Within this directory, image data is continually designated for printing and because this information is constantly being output, this information can remain within the memory device without having to be deleted at any certain period of time; see ¶ [0051]),

wherein said downloading unit downloads the newly designated image data to be printed which is not cached in the cache memory from the server device (i.e. the input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]).

Re Claim 16: Holmstead '905 discloses an information processing method performed in an information processing apparatus communicating with a server device and a printer, the method comprising:

designating a plurality of image data to be printed among image data stored in the server device in response to a user operation (i.e. in the system, the memories storing the image data are compared to one another after the user identifies another print job to print and the input buffer (304) is updated by the set of print elements that were not totally present in the print job designated. The system determines if the print job stored in the input buffer contains all of the needed elements for the job in the local memory. If the job does not contain all of the needed elements in the local memory, the CPU designates image data among the other image data stored in the remote server devices the specific elements needed to complete the desired print job; see paragraphs [0033]-[0044]);

downloading the designated image data from the server device (i.e. the Holmstead reference downloads image data identified by job element information from a server device through a network card that facilitates network communication. Since the internal components in the printer can be in a host computer coupled to a printer, the functionality of the system using a host computer with the input buffer and local memory is an alternative implementation of the method of printing image data. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired



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from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]);

    caching the downloaded image data in a cache memory included in the image processing apparatus (i.e. in Holmstead '905 the system can be configured to have components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100), or acquired from the remote site, in association with the host computer (206). The elements downloaded from the remote site is stored in the local memory, which is located in the printer, and the local memory has print job information that has been designated for printing and acquired from the server device. The information stored is also from previous jobs that have been printed on the printer and the step (414) is used to store a print ready document on the printer with the previously printed job; see figs. 2 and 3; paragraphs [0032]-[0044]);

    reading the cached image data from the cache memory and executing print processing of the read image data (i.e. in the system, the CPU checks to see if all the data needed to print a job is located within the cache memory device. If all the information is needed within the cache memory device, the print function is operated based on the information read from the cache; see ¶ [0032]-[0044]); and

deleting from the cache memory the image data which is not successively designated as image data to be printed (i.e. within the cache memory is different directories. Data that is not successively designated to be printed may be stored in directory A. With the image data being stored in this directory, cached image data can be erased or overwritten every thirty days since this information is not used continually; see ¶ [0051]), and not deleting from the cache memory the image, and not deleting from the cache memory the image data which is successively designated, when a plurality of image data is newly designated (i.e. Other image data can be stored in directory B within the local or cache memory. Within this directory, image data is continually designated for printing and because this information is constantly being output, this information can remain within the memory device without having to be deleted at any certain period of time; see ¶ [0051]); and

downloading the newly designated image data to be printed which is not cached in the cache memory from the server device (i.e. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]).

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Re Claim 17: Holmstead '905 discloses a computer-readable non-transitory storage medium storing a computer-executable program for an information processing method performed in an information processing apparatus communicating with a server device and a printer (i.e. a graphical user interface (114) sends commands to the printer device to operate the control system (306) in a normal or schedule mode. This controls the printer since the control system is commanded to download print job elements specific to the mode use in order to print a print job that is generated from the print job elements, which is analogous to a plurality of image data; see paragraphs [0033] and [0060]-[0071]), comprising:

a step of designating a plurality of image data to be printed among image data stored in the server device in response to a user operation (i.e. in the system, the memories storing the image data are compared to one another after the user identifies another print job to print and the input buffer (304) is updated by the set of print elements that were not totally present in the print job designated. The system determines if the print job stored in the input buffer contains all of the needed elements for the job in the local memory. If the job does not contain all of the needed elements in the local memory, the CPU designates image data among the other image data stored in the remote server devices the specific elements needed to complete the desired print job; see paragraphs [0033]-[0044]);

a step of downloading the designated image data from the server device (i.e. the Holmstead reference downloads image data identified by job element information from a server device through a network card that facilitates network communication. Since the

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internal components in the printer can be in a host computer coupled to a printer, the functionality of the system using a host computer with the input buffer and local memory is an alternative implementation of the method of printing image data. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]);

a step of caching the downloaded image data in a cache memory included in the image processing apparatus (i.e. in Holmstead '905 the system can be configured to have components of the system in a printer (100), or as a part of a host computer (206) in association with a printer (100). The host computer (206) is considered as the information processing apparatus, which has an image data memory (302). The local memory (302) has print job elements that can be transmitted to the printer (100), or acquired from the remote site, in association with the host computer (206). The elements downloaded from the remote site is stored in the local memory, which is located in the printer, and the local memory has print job information that has been designated for printing and acquired from the server device. The information stored is also from previous jobs that have been printed on the printer and the step (414) is used

to store a print ready document on the printer with the previously printed job; see figs. 2 and 3; paragraphs [0032]-[0044]);

a step of reading the cached image data from the cache memory and executing print processing of the read image data (i.e. in the system, the CPU checks to see if all the data needed to print a job is located within the cache memory device. If all the information is needed within the cache memory device, the print function is operated based on the information read from the cache; see ¶ [0032]-[0044]); and

a step of deleting from the cache memory the image data which is not successively designated as image data to be printed (i.e. within the cache memory is different directories. Data that is not successively designated to be printed may be stored in directory A. With the image data being stored in this directory, cached image data can be erased or overwritten every thirty days since this information is not used continually; see ¶ [0051]), and not deleting from the cache memory the image, and not deleting from the cache memory the image data which is successively designated, when a plurality of image data is newly designated (i.e. Other image data can be stored in directory B within the local or cache memory. Within this directory, image data is continually designated for printing and because this information is constantly being output, this information can remain within the memory device without having to be deleted at any certain period of time; see ¶ [0051]); and

a step of downloading the newly designated image data to be printed which is not cached in the cache memory from the server device (i.e. The input buffer inside the host computer, considered as the storage unit containing the print list, is used to include

certain job elements while the local memory does not contain the missing job elements, which is considered as the cache memory. Once the image data is acquired from the remote sites, or server, the image data is combined into a complete job in the input buffer and printed. The job elements that were added to job that were the missing elements are then stored in the local memory, considered as the cache memory; see paragraphs [0029]-[0044]).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ichihara (USP 7023575) discloses an image data printing system and image data printing method.

Miyazaki (USP 5587800) discloses an image processing method and apparatus that contains the deletion of image data in a cache that has the lowest frequency of being accessed in the memory. This can be used to read on the deleting feature in the claims. Check claim 3 in the patent and the background of the invention.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/C. D./

/Chad Dickerson/

Examiner, Art Unit 2625

/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625